Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (currently amended) A ~~hosting service providing~~ platform for providing hosting services, comprising:

~~an automated~~ a computer cluster formed by a plurality of hardware-independent cluster nodes, said ~~automated~~ computer cluster including a control center; and

a plurality of virtual environments running on the computer cluster, wherein the virtual environments do not require dedicated memory, ~~and~~

~~a plurality of hardware-independent cluster nodes~~,

~~whereby~~ wherein said control center coordinates ~~the~~ functions of said plurality of hardware-independent cluster nodes.

2. (currently amended) The platform as defined in claim 1, wherein said plurality of hardware-independent cluster nodes further comprises a ~~specialized~~ distributed file system having a common name space.

3. (currently amended) The platform as defined in claim 2, wherein said ~~specialized~~ distributed file system is integrated and optimized for said automated computer cluster.

4. (currently amended) The platform as defined in claim 2, wherein said ~~specialized~~ distributed file system stores ~~further comprises~~ data for [a] the plurality of virtual environments.

5. (currently amended) The platform as defined in claim 4, wherein each of said plurality of virtual environments further comprises:

software providing virtualization ~~emulation~~ of a full service computer with its own operating system;

a unique administrative root user for each member of said plurality of virtual environments;

a file system template and file tree; and

operating system parameter configuration;

and further wherein each of said plurality of virtual environments does not ~~include dedicated physical memory or any~~ require other dedicated hardware resources.

6. (currently amended) The platform as defined in claim 4, wherein said ~~specialized~~ distributed file system further comprises:

means for making ~~file~~ files containing transactions ~~from~~ of any file system changes made in at least one of said plurality of virtual environments;

means for distributing said files containing the transactions to achieve the appropriate level of data accessibility; and

means for providing ~~permitting~~ access to data from each member of said plurality of cluster nodes.

7. (currently amended) A method for maintaining a ~~providing a hosting service providing~~ platform that provides hosting services, comprising ~~the steps of~~:

~~automating~~ forming a computer cluster from a plurality of hardware-independent cluster nodes~~, further including~~ ;

establishing a control center for coordinating functions of said plurality of hardware-independent cluster nodes; and

operating a plurality of virtual environments on the computer cluster, wherein the virtual environments do not require dedicated memory ~~a plurality of hardware-independent cluster nodes, whereby said control center coordinates the functions of said plurality of hardware-independent cluster nodes~~.

8. (currently amended) The method as defined in claim 7, wherein the step of operating the plurality of virtual environments ~~said plurality of hardware-independent cluster nodes~~ further comprises ~~includes the steps of~~ implementing a ~~specialized~~ distributed file system having a common name space, ~~further~~ wherein said ~~specialized~~ distributed file system is integrated and optimized for each member of said plurality of hardware-independent cluster nodes.

9. (canceled)

10. (currently amended) The method of claim [[9]] 8, wherein the step of operating said plurality of virtual environments further comprises ~~includes the steps of~~:

installing software ~~which emulates~~ that virtualizes a full-service computer with its own operating system;

establishing a unique administrative root user for each member of said plurality of virtual environments;

establishing a file system template and file tree for each member of said plurality of virtual environments;

implementing the operating system parameter configuration for each member of said plurality of virtual environments;

~~and further~~ wherein said step of operating said plurality of virtual environments does not require ~~include the step of dedicating physical memory or~~ any other dedicated hardware resources.

11. (currently amended) The method as defined in claim 10, wherein the step of operating said plurality of virtual environments further comprises ~~includes the steps of~~:

making ~~file~~ files containing transactions ~~from~~ of any changes in the ~~to said~~ file system made in at least one of said plurality of virtual environments;

distributing ~~said file~~ the files containing the transactions to achieve the appropriate level of data accessibility; and

providing ~~permitting~~ access to data stored on the distributed file system from each member of said plurality of cluster nodes.

12. (currently amended) The method as defined in claim 10, wherein the step of operating each member of said plurality of hardware-independent cluster nodes further comprises ~~includes the step of~~:

installing ~~a base~~ an operating system, and establishing and configuring network ~~connection~~ connections;

providing access to the distributed file system containing the file system template for each virtual environment within said cluster node;

accessing the resources of said cluster node; and

utilizing said cluster node for launching new virtual environments.

13. (currently amended) The method as defined in claim 11, wherein the step of providing ~~permitting~~ access to data from each of the plurality of virtual environments at said plurality of hardware independent cluster nodes further comprises ~~includes the step of:~~ restarting each virtual environment ~~in~~ of a failed cluster node at another cluster node ~~having~~ that has appropriate resources available.

14. (currently amended) A method for utilizing a hosting service ~~providing~~ platform, ~~in an operating system~~ comprising ~~the steps of~~:

requesting a service ~~in said~~ from an operating system;

operating a virtual environment for delivery of the service to a user; and

utilizing a ~~specialized~~ distributed file system having a common name space for use by the virtual environment.

15. (currently amended) The method of claim 14, wherein the step of operating said virtual environment further comprises ~~includes the step of:~~ installing ~~any~~ an application ~~of said operating system~~ into the virtual environment.

16. (currently amended) The method of claim 14, wherein the step of operating said virtual environment further comprises ~~includes the step of:~~ configuring ~~any~~ an application ~~of said operating system~~.

17. (currently amended) The method of claim 14, wherein the step of operating said virtual environment further comprises ~~includes the step of:~~ launching ~~any~~ an application of said operating system from said virtual environment.

18. (currently amended) The method of claim 14, wherein the step of operating said virtual environment further comprises ~~includes the step of:~~ repairing remotely ~~any~~ a failed software configuration of said virtual environment.

19. (currently amended) The method of claim 14, wherein the step of utilizing a ~~specialized~~ distributed file system further comprises ~~includes the step of:~~ achieving a desired ~~corresponding~~ fault tolerance level.

20. (new) A platform that provides a hosting service, comprising;

a plurality of hardware-independent cluster nodes forming a computer cluster;

a plurality of virtual environments supported by the cluster nodes and providing hosting services; and

a control center that coordinates functions of the computer cluster.

21. (new) The platform of claim 20, wherein the plurality of hardware-independent cluster nodes further comprises a distributed file system having a common name space.

22. (new) The platform of claim 21, wherein the distributed file system is integrated and optimized for the automated computer cluster.

23. (new) The platform of claim 21, wherein the distributed file system stores data for the plurality of virtual environments.

24. (new) The platform of claim 21, wherein the distributed file system further comprises:

means for making files containing transactions from any file system changes made in at least one of the plurality of virtual environments;

means for distributing the files containing the transactions to achieve a desired level of data accessibility; and

means for providing access to the distributed storage system from each of the plurality of cluster nodes.

25. (new) The platform of claim 20, wherein each of the plurality of virtual environments further comprises:

software providing virtualization of a full service computer with its own operating system;

a unique administrative "root" user for each of the plurality of virtual environments;

a file system template and a portion of a namespace dedicated to the virtual environments; and

operating system parameter configuration,

wherein each of the plurality of virtual environments does not require dedicated hardware resources.

26. (new) The platform of claim 20, wherein each of the plurality of virtual environments does not require dedicated hardware resources.

27. (new) The platform of claim 20, wherein each of the plurality of virtual environments does not require locking of hardware resources that are supported by standard operating system mechanisms.

28. (new) The platform of claim 27, wherein the hardware resources include random access memory.

29. (new) The platform of claim 20, wherein each of the plurality of virtual environments does not require emulation of hardware resources.

30. (new) A method for providing a hosting services platform comprising:

forming a computer cluster from a plurality of hardware-independent cluster nodes;

operating a plurality of virtual environments supported by the nodes;

providing hosting services from the virtual environments; and

establishing a control center for managing functions of the computer cluster.

31. (new) The method of claim 30, wherein the step of forming the cluster further comprises implementing a distributed file system having a common name space,

wherein the distributed file system is integrated and optimized for each of the plurality of hardware-independent cluster nodes.

32. (new) The method of claim 31, wherein the step of operating the plurality of virtual environments further comprises:

installing software that virtualizes a full-service computer with its own operating system;

establishing a unique administrative "root" user for each of the plurality of virtual environments;

establishing a file system template and file tree for each of the plurality of virtual environments; and

configuring operating system parameters for each of the plurality of virtual environments.

33. (new) The method of claim 32, wherein the step of forming the computer cluster further comprises:

installing an operating system, and establishing and configuring physical network connections;

providing access to the distributed file system containing the file system template for each virtual environment within the cluster;

utilizing the cluster node for launching the virtual environments; and

using the virtual environments for accessing resources of the cluster that service user requests.

34. (new) The method of claim 33, wherein the step of providing access to the distributed file system further comprises restarting each virtual environment of a failed cluster node at another cluster node that has available resources.

35. (new) The method of claim 30, wherein the step of operating the plurality of virtual environments does not lock hardware resources that are supported by standard operating system mechanisms.

36. (new) The platform of claim 35, wherein the hardware resources include random access memory.

37. (new) The method of claim 30, wherein the step of operating the plurality of virtual environments further comprises:

making files containing transactions of any changes in a file system made in at least one of the plurality of virtual environments;

distributing the files containing the transactions to achieve a desired level of data accessibility; and

providing access to data from each of the plurality of cluster nodes.

38. (new) The method of claim 30, wherein the virtual environments do not emulate hardware resources.

39. (new) A method for utilizing a hosting service platform in an operating system comprising:

receiving a request for a service from the operating system;

operating a virtual environment adapted to respond to the request for service; and

utilizing a distributed file system with a common name space to respond to the request for service.

40. (new) The method of claim 39, wherein the step of operating the virtual environment further comprises installing an application into the virtual environment.

41. (new) The method of claim 40, wherein the step of operating the virtual environment further comprises configuring the application.

42. (new) The method of claim 39, wherein the step of operating the virtual environment further comprises launching the application.

43. (new) The method of claim 39, wherein the step of operating the virtual environment further comprises repairing remotely a failed software configuration of the virtual environment.

44. (new) The method of claim 39, wherein the step of utilizing the distributed file system further comprises achieving a desired fault tolerance level.

45. (new) A computer program product for providing a hosting services platform, comprising a computer usable medium having computer program logic recorded thereon for controlling a processor, the computer program logic comprising:

computer program code means for automating a computer cluster formed by a plurality of hardware-independent cluster nodes;

computer program code means for operating a plurality of virtual environments supported by the nodes;

computer program code means for providing hosting services from virtual environments; and

computer program code means for establishing a control center for managing functions of the computer cluster.